

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/743,522	01/08/2001	Andreas Dobrawa	67190/988533	3062	
75	590 11/29/2004		EXAMINER		
Kenyon & Kenyon			DONOVAN, LINCOLN D		
One Broadway New York, NY 10004			ART UNIT	PAPER NUMBER	
			2832		
			DATE MAILED: 11/29/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

-	,	Application No.	Applicant(s)			
		09/743,522	DOBRAWA ET AL.			
Office	Action Summary	Examiner	Art Unit			
		Lincoln Donovan	2832			
The MAIL Period for Reply	ING DATE of this communication app	ears on the cover sheet with the	correspondence address			
THE MAILING C  - Extensions of time rr after SIX (6) MONTH  - If the period for reply - If NO period for reply - Failure to reply within Any reply received b	STATUTORY PERIOD FOR REPLY DATE OF THIS COMMUNICATION. hay be available under the provisions of 37 CFR 1.13 tS from the mailing date of this communication. It is specified above is less than thirty (30) days, a reply it is specified above, the maximum statutory period we in the set or extended period for reply will, by statute, by the Office later than three months after the mailing adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) datil apply and will expire SIX (6) MONTHS fror cause the application to become ABANDON	imely filed  ays will be considered timely.  In the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status						
1) Responsiv	re to communication(s) filed on	<u>.</u>				
2a)☐ This action	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Clair	ms					
4a) Of the 5) ☐ Claim(s) _ 6) ☑ Claim(s) 5 7) ☐ Claim(s) _	i-9 is/are pending in the application. above claim(s) is/are withdraw is/are allowed. is/are rejected is/are objected to are subject to restriction and/or					
Application Papers	:					
9) The specifi	cation is objected to by the Examiner	•				
10)⊠ The drawin	)⊠ The drawing(s) filed on <u>08 January 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	nt drawing sheet(s) including the correction of the Example 1 to by the Example 1 to be 1 to 1 t	- · · · · · · · · · · · · · · · · · · ·				
Priority under 35 U	.S.C. & 119					
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		_				
Notice of Reference    Notice of Draftsper	es Cited (PTO-892) son's Patent Drawing Review (PTO-948)	4) Interview Summar Paper No(s)/Mail D				
	sure Statement(s) (PTO-1449 or PTO/SB/08)		Patent Application (PTO-152)			

Application/Control Number: 09/743,522

Art Unit: 2832

#### **DETAILED ACTION**

## Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castenschiold et al. [US 5,070,252] in view of Maher [US 3,629,744] and DE 4447391C1.

Regarding claims 5-7, Castenschiold et al. disclose a drive unit for switching a circuit breaker on and off comprising:

- a solenoid actuator [76];
- a switching device [figure 1] including two separately drivable and interlocked reversing switches providing control of the operation of the circuit breaker; and
- dynamic magnetically actuated power contactors [figures 16a-16c] having a switching capacity for load switching.

Application/Control Number: 09/743,522

Art Unit: 2832

Castenschiold et al. disclose everything claimed except the specific switching device for the contactors and the use of equalizing capacitors connected in parallel therewith.

Maier discloses a motor operator [70] for a circuit breaker [10] having a pair of relays [figure 6] controlling the direction of the operation of the motor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the motor control design of Maier for the solenoid of .

Castenschiold et al., in order to improve switching stability.

DE4447391C1 discloses the use of equalizing capacitors in a high power circuit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use capacitors in the switch of Castenschiold et al., as modified, in order to prevent arcing.

Regarding claim 8, Castenschiold et al., as modified, disclose everything claimed except the specific size of the capacitors.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to size the capacitors in accordance with the anticipated load.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castenschiold et al., as modied, as applied to claim 5 above, and further in view of DE 3823574.

Castenschiold et al., as modified, disclose everything claimed except the relay circuitry being on a printed circuit board.

DE 3823574 discloses a motor control circuit being mounted on a printed circuit board.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the circuitry of Castenschiold et al., as modified, on a printed circuit board, as suggested by DE 3823574 in order to provide support for the low voltage components.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Archer et al. [US 3,198,907], Palmer et al. [US 3,794,943] and Dexter [US 3,470,503].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ldd